[4910-13-P]

#### DEPARTMENT OF TRANSPORTATION

**Federal Aviation Administration** 

**14 CFR Part 39** 

[Docket No. FAA-2016-6669; Directorate Identifier 2015-NM-191-AD; Amendment

39-18698; AD 2016-22-09]

**RIN 2120-AA64** 

**Airworthiness Directives;** The Boeing Company Airplanes

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule.

**SUMMARY:** We are superseding Airworthiness Directive (AD) 2006-20-11 for certain

The Boeing Company Model 757-200, -200CB, and -200PF series airplanes.

AD 2006-20-11 required initial and repetitive detailed or high frequency eddy current (HFEC) inspections for cracks around the rivets at the upper fastener row of the skin lap splice of the fuselage, and repair of any crack found. This new AD no longer allows the detailed inspections and instead requires repetitive external HFEC inspections for cracking of the skin lap splices of the fuselage, and repair if necessary. This AD was prompted by an evaluation done by the design approval holder (DAH) indicating that the fuselage skin lap splice is subject to widespread fatigue damage (WFD). We are issuing this AD to detect and correct fatigue cracking at certain skin lap splice locations of the fuselage, which could result in reduced structural integrity and rapid decompression of the airplane.

**DATES:** This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain other publication listed in this AD as of November 8, 2006 (71 FR 58485, October 4, 2006).

ADDRESSES: For service information identified in this final rule, contact Boeing Commercial Airplanes, Attention: Contractual & Data Services (C&DS), 2600 Westminster Blvd., MC 110-SK57, Seal Beach, CA 90740; telephone 562-797-1717; Internet https://www.myboeingfleet.com. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221. It is also available on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2016-6669.

#### **Examining the AD Docket**

You may examine the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2016-6669; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The address for the Docket Office (phone: 800-647-5527) is Docket Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

**FOR FURTHER INFORMATION CONTACT:** Eric Schrieber, Aerospace Engineer, Airframe Branch, ANM-120L, FAA, Los Angeles Aircraft Certification Office (ACO),

3960 Paramount Boulevard, Lakewood, CA 90712-4137; phone: 562-627-5348; fax: 562-627-5210; email: eric.schrieber@faa.gov.

#### SUPPLEMENTARY INFORMATION:

#### **Discussion**

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to supersede AD 2006-20-11, Amendment 39-14781 (71 FR 58485, October 4, 2006) ("AD 2006-20-11"). AD 2006-20-11 applied to certain The Boeing Company Model 757-200, -200CB, and -200PF series airplanes. The NPRM published in the Federal Register on May 12, 2016 (81 FR 29508) ("the NPRM"). The NPRM was prompted by an evaluation done by the DAH indicating that the fuselage skin lap splice is subject to WFD. The NPRM proposed to require repetitive external HFEC inspections for cracking of the skin lap splices of the fuselage, and repair if necessary. We are issuing this AD to detect and correct fatigue cracking at certain skin lap splice locations of the fuselage, which could result in reduced structural integrity and rapid decompression of the airplane.

# Comments

We gave the public the opportunity to participate in developing this AD. The following presents the comments received on the NPRM and the FAA's response to each comment.

#### Support of the NPRM

FedEx provided comments that supported the intent of the NPRM.

#### **Request to Change Compliance Time**

Boeing and United Airlines (UA) asked that we change the compliance time for the repetitive HFEC inspections specified in paragraph (j) of the proposed AD. Boeing learned that some operators began doing inspections long before the 37,500-flight-cycle threshold was attained. Boeing stated that the compliance table in Boeing Special Attention Service Bulletin 757-53-0090, Revision 1, dated November 19, 2015, provided grace periods for doing the HFEC inspections after doing previous inspections, but did not provide for previous inspections being done within the grace period or before the required threshold of 37,500 flight cycles, whichever occurs later. Boeing added that, as written, the service information specifies repetitive inspections within 3,000 flight cycles after any previous detailed inspection and within 12,000 flight cycles after any previous HFEC inspection – even if the interval occurred before the 37,500-flight-cycle threshold.

UA stated that if an operator decided to proactively accomplish either a detailed or HFEC inspection before the specified compliance time in, and in accordance with either Boeing Special Attention Service Bulletin 757-53-0090, dated June 2, 2005 or Boeing Special Attention Service Bulletin 757-53-0090, Revision 1, dated November 19, 2015, then the inspection would have to be repeated within 3,000 or 12,000 flight cycles, depending on which inspection was previously done. UA stated that this compliance time could be much sooner than the intended 37,500 flight cycles. UA noted that it discussed this problem with Boeing and hoped it could be clarified in the NPRM.

We agree with the commenters' requests to change the compliance time for the repetitive HFEC inspections specified in paragraph (j) of this AD. According to the proposed AD, operators that accomplished the inspections early would be required to do the inspections before reaching the inspection threshold specified in paragraph (j) of the proposed AD. It was not the intent of Boeing or the FAA to require that the airplane be inspected prior to reaching the required threshold. Therefore, we have added new paragraphs (j)(1) and (j)(2) to this AD to include the additional compliance times.

# **Effect of Winglets on Accomplishment of the Proposed Actions**

Aviation Partners Boeing stated that accomplishing the supplemental type certificate (STC) ST01518SE does not affect compliance with the actions specified in the NPRM.

We agree with the commenter. We have redesignated paragraph (c) of the proposed AD as (c)(1) and added a new paragraph (c)(2) to this AD to state that installation of STC ST01518SE does not affect the ability to accomplish the actions required by this final rule. Therefore, for airplanes on which STC ST01518SE is installed, a "change in product" alternative method of compliance (AMOC) approval request is not necessary to comply with the requirements of 14 CFR 39.17.

# **Request to Include Approved Repairs in Revised Service Information**

UA asked that instructions for approved repairs be incorporated into the next revision of Boeing Special Attention Service Bulletin 757-53-0090, Revision 1, dated November 19, 2015, as an AMOC to the NPRM. UA stated that the lack of approved repairs in the service information adds a significant burden to operators, Boeing Designated Airworthiness Representatives, and the Los Angeles Aircraft Certification Office.

We acknowledge the commenter's concern. If the service information is revised to include instructions for approved repairs, affected operators may request approval to use the later revision of the referenced service information as an AMOC, under the provisions of paragraph (m) of this AD. We have made no change to this AD in this regard.

#### Conclusion

We reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting this AD with the changes described previously, and minor editorial changes. We have determined that these minor changes:

• Are consistent with the intent that was proposed in the NPRM for correcting the unsafe condition; and

 Do not add any additional burden upon the public than was already proposed in the NPRM.

We also determined that these changes will not increase the economic burden on any operator or increase the scope of this AD.

# **Related Service Information under 1 CFR part 51**

We reviewed Boeing Special Attention Service Bulletin 757-53-0090, Revision 1, dated November 19, 2015. The service information describes procedures for repetitive external HFEC inspections for cracking of the skin lap splices of the fuselage. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

# **Costs of Compliance**

We estimate that this AD affects 572 airplanes of U.S. registry.

We estimate the following costs to comply with this AD:

#### **Estimated costs**

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Inspections [retained actions from AD 2006-20-11]	Up to 20 work-hours X \$85 per hour = up to \$1,700 per inspection cycle	\$0	Up to \$1,700 per inspection cycle	Up to \$972,400 per inspection cycle
New inspections	Up to 20 work-hours X \$85 per hour = up to \$1,700 per inspection cycle	\$0	Up to \$1,700 per inspection cycle	Up to \$972,400 per inspection cycle

We have received no definitive data that would enable us to provide a cost estimate for the on-condition repairs specified in this AD.

# **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, Section 106, describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701, "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

## **Regulatory Findings**

We have determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
  - (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

# List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

## **Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

#### **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### § 39.13 [Amended]

2. The FAA amends § 39.13 by removing Airworthiness Directive (AD) 2006-20-11, Amendment 39-14781 (71 FR 58485, October 4, 2006), and adding the following new AD:

**2016-22-09 The Boeing Company:** Amendment 39-18698; Docket No. FAA-2016-6669; Directorate Identifier 2015-NM-191-AD.

# (a) Effective Date

This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

#### (b) Affected ADs

This AD replaces AD 2006-20-11, Amendment 39-14781 (71 FR 58485, October 4, 2006) ("AD 2006-20-11"). This AD affects AD 2006-11-11, Amendment 39-14615 (71 FR 30278, May 26, 2006) ("AD 2006-11-11").

#### (c) Applicability

(1) This AD applies to The Boeing Company Model 757-200, -200CB, and -200PF series airplanes, certificated in any category, as identified in Boeing Special Attention Service Bulletin 757-53-0090, Revision 1, dated November 19, 2015.

(2) Installation of Supplemental Type Certificate (STC) ST01518SE

(http://rgl.faa.gov/Regulatory\_and\_Guidance\_Library/rgSTC.nsf/0/38B606833BBD98B3

86257FAA00602538?OpenDocument&Highlight=st01518se) does not affect the ability to accomplish the actions required by this AD. Therefore, for airplanes on which STC ST01518SE is installed, a "change in product" alternative method of compliance (AMOC) approval request is not necessary to comply with the requirements of 14 CFR 39.17.

# (d) Subject

Air Transport Association (ATA) of America Code 53, Fuselage.

## (e) Unsafe Condition

This AD was prompted by an evaluation done by the design approval holder indicating that the fuselage skin lap splice is subject to widespread fatigue damage. We are issuing this AD to detect and correct fatigue cracking at certain skin lap splice locations of the fuselage, which could result in reduced structural integrity and rapid decompression of the airplane.

# (f) Compliance

Comply with this AD within the compliance times specified, unless already done.

# (g) Retained Initial and Repetitive Inspections, with Terminating Action

This paragraph restates the requirements of paragraph (f) of AD 2006-20-11, with terminating action. Do initial and repetitive detailed or high frequency eddy current (HFEC) inspections for cracking around the rivets at the upper fastener row of the skin lap splice of the fuselage by doing all the actions in accordance with the Accomplishment Instructions of Boeing Special Attention Service Bulletin 757-53-0090, dated June 2, 2005, except as provided by paragraphs (h) and (i) of this AD. Do the inspections at the applicable times specified in Paragraph 1.E., "Compliance," of Boeing Special Attention Service Bulletin 757-53-0090, dated June 2, 2005; except where Boeing Special

Attention Service Bulletin 757-53-0090, dated June 2, 2005, specifies a compliance time "after the original release date of this service bulletin," this AD requires compliance after November 8, 2006 (the effective date of AD 2006-20-11). Accomplishing an inspection required by paragraph (j) of this AD terminates the inspections required by this paragraph.

# (h) Retained Repair, with No Changes

This paragraph restates the requirements of paragraph (g) of AD 2006-20-11, with no changes. If any crack is found during any inspection required by paragraph (g) of this AD: Before further flight, repair the crack using a method approved in accordance with the procedures specified in paragraph (m) of this AD.

# (i) Retained Provision Regarding Reporting, with No Changes

This paragraph restates the provision specified in paragraph (h) of AD 2006-20-11, with no changes. Although Boeing Special Attention Service Bulletin 757-53-0090, dated June 2, 2005, recommends that inspection results be reported to the manufacturer, this AD does not include that requirement.

# (j) New Repetitive Inspections

At the applicable time specified in table 1 of paragraph 1.E., "Compliance," of Boeing Special Attention Service Bulletin 757-53-0090, Revision 1, dated November 19, 2015, except as provided by paragraphs (j)(1), (j)(2), and (l)(1) of this AD: Do an external HFEC inspection for cracking of the skin lap splices of the fuselage, in accordance with the Accomplishment Instructions of Boeing Special Attention Service Bulletin 757-53-0090, Revision 1, dated November 19, 2015. Repeat the inspection thereafter at the applicable times specified in table 1 of paragraph 1.E., "Compliance," of Boeing Special Attention Service Bulletin 757-53-0090, Revision 1, dated November 19, 2015. Doing an inspection required by this paragraph terminates the inspections required by paragraph (g) of this AD.

- (1) For airplanes on which Option 1 (detailed inspection) of Boeing Special Attention Service Bulletin 757-53-0090, dated June 2, 2005, has been done: Repeat the HFEC inspection before the accumulation of 37,500 total flight cycles, or within 3,000 flight cycles after accomplishing the most recent detailed inspection, whichever occurs later.
- (2) For airplanes on which Option 2 (HFEC inspection) of Boeing Special Attention Service Bulletin 757-53-0090, dated June 2, 2005, has been done: Repeat the HFEC inspection before the accumulation of 37,500 total flight cycles, or within 12,000 flight cycles after accomplishing the most recent HFEC inspection, whichever occurs later.

# (k) Repair for Cracking Found During Inspections Required by Paragraph (j) of this AD

If any cracking is found during any inspection required by paragraph (j) of this AD, repair before further flight using a method approved in accordance with the procedures specified in paragraph (m) of this AD.

#### (1) Exceptions to Service Information

- (1) Where Boeing Special Attention Service Bulletin 757-53-0090, Revision 1, dated November 19, 2015, specifies a compliance time "after the Revision 1 date of this service bulletin," this AD requires compliance within the specified compliance time after the effective date of this AD.
- (2) Although Boeing Special Attention Service Bulletin 757-53-0090, Revision 1, dated November 19, 2015, specifies to contact Boeing for repair instructions, and specifies that action as "RC" (Required for Compliance), paragraph (k) of this AD requires repair before further flight using a method approved in accordance with the procedures specified in paragraph (m) of this AD.

# (m) Alternative Methods of Compliance (AMOCs)

- (1) The Manager, Los Angeles Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in paragraph (n)(1) of this AD. Information may be emailed to:
- 9-ANM-LAACO-AMOC-Requests@faa.gov.
- (2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.
- (3) An AMOC that provides an acceptable level of safety may be used for any repair, modification, or alteration required by this AD if it is approved by the Boeing Commercial Airplanes Organization Designation Authorization (ODA) that has been authorized by the Manager, Los Angeles ACO, to make those findings. To be approved the repair method, modification deviation, or alteration deviation must meet the certification basis of the airplane and the approval must specifically refer to this AD.
- (4) AMOCs approved for AD 2006-20-11, are approved as AMOCs for the corresponding provisions of paragraphs (g) and (j) of this AD.
- (5) Except as required by paragraph (1)(2) of this AD: For service information that contains steps that are labeled as Required for Compliance (RC), the provisions of paragraphs (m)(5)(i) and (m)(5)(ii) apply.
- (i) The steps labeled as RC, including substeps under an RC step and any figures identified in an RC step, must be done to comply with the AD. If a step or substep is labeled "RC Exempt," then the RC requirement is removed from that step or

substep. An AMOC is required for any deviations to RC steps, including substeps and identified figures.

- (ii) Steps not labeled as RC may be deviated from using accepted methods in accordance with the operator's maintenance or inspection program without obtaining approval of an AMOC, provided the RC steps, including substeps and identified figures, can still be done as specified, and the airplane can be put back in an airworthy condition.
- (6) The inspections specified in paragraph (g) of this AD are approved as an AMOC to paragraph (h) of AD 2006-11-11 for the inspections of Significant Structural Items (SSI) 53-30-07 and 53-60-07 (fuselage lap splices, left and right upper fastener row) listed in the May 2003 or June 2005 revision of the Boeing 757 Maintenance Planning Data (MPD) Document D622N001-9. This AMOC applies only to the common areas identified in paragraphs (m)(6)(i) and (m)(6)(ii) of this AD. All provisions of AD 2006-11-11 that are not specifically referenced in the above statements remain fully applicable and must be complied with as specified in AD 2006-11-11. Operators may revise their maintenance or inspection program with these alternative inspections for common areas.
- (i) Common areas inspected before the effective date of this AD, in accordance with the Accomplishment Instructions of Boeing Special Attention Service Bulletin 757-53-0090, dated June 2, 2005.
- (ii) Common areas inspected in accordance with the Accomplishment Instructions of Boeing Special Attention Service Bulletin 757-53-0090, Revision 1, dated November 19, 2015.

#### (n) Related Information

For more information about this AD, contact Eric Schrieber, Aerospace Engineer, Airframe Branch, ANM-120L, FAA, Los Angeles ACO, 3960 Paramount Boulevard,

Lakewood, CA 90712-4137; phone: 562-627-5348; fax: 562-627-5210; email: eric.schrieber@faa.gov.

## (o) Material Incorporated by Reference

- (1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.
- (2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.
- (3) The following service information was approved for IBR on [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].
- (i) Boeing Special Attention Service Bulletin 757-53-0090, Revision 1, dated November 19, 2015.
  - (ii) Reserved.
- (4) The following service information was approved for IBR on November 8, 2006 (71 FR 58485, October 4, 2006).
  - (i) Boeing Special Attention Service Bulletin 757-53-0090, dated June 2, 2005.
  - (ii) Reserved.
- (5) For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Contractual & Data Services (C&DS), 2600 Westminster Blvd., MC 110-SK57, Seal Beach, CA 90740; telephone 562-797-1717; Internet https://www.myboeingfleet.com.
- (6) You may view this service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

(7) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued in Renton, Washington, on October 20, 2016.

Dionne Palermo,
Acting Manager,
Transport Airplane Directorate,
Aircraft Certification Service.
[FR Doc. 2016-25958 Filed: 11/3/2016 8:45 am; Publication Date: 11/4/2016]